

Notice of Allowability

Application No.

10/027,683

Examiner

Rodney G. McDonald

Applicant(s)

WELDON ET AL.

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Examiner's Interview of Jan. 13, 2005.
2. ☒ The allowed claim(s) is/are 22,23,27-34 and 38-43.
3. ☒ The drawings filed on 01 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 1-13-05
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


RODNEY G. McDONALD
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Shirley Church on January 13, 2005.

The application has been amended as follows:

Claim 22, line 7, after "wherein" insert the phrase "an exterior surface layer of said component is".

Claim 22, line 8, after "surface" insert the phrase "and which".

Claim 27, line 1, replace "material" with "exterior surface layer".

Claim 29, line 2, replace "material" with "exterior surface".

Claim 33, line 7, after "wherein" insert the phrase "an exterior surface layer of said deposition ring is".

Claim 33, line 8, after "surface" insert the phrase "and which".

Claim 38, line 1, replace "material" with "exterior surface layer".

Claim 40, line 2, replace "material" with "exterior surface".

The following is an examiner's statement of reasons for allowance:

Claims 22, 23 and 27-32 are allowable over the prior art of record because the prior art of record does not teach a component for use within a semiconductor processing chamber as claimed including the component having at least one ceramic

Art Unit: 1753

surface which has patterned mechanical interlocks formed therein, wherein the patterned mechanical interlocks are undercut into the at least one ceramic surface and wherein an exterior surface layer of the component is a sacrificial coating which can be removed essentially without harming the ceramic surface and which has been applied over the ceramic surface containing the patterned mechanical interlocks.

Claims 33, 34, 38-43 are allowable over the prior art of record because the prior art of record does not teach a deposition ring for use within a physical vapor deposition chamber as claimed including the deposition ring having at least one ceramic surface which has patterned mechanical interlocks formed therein, wherein the patterned mechanical interlocks are undercut into the at least one ceramic surface and wherein an exterior surface layer of the deposition ring is a sacrificial coating which can be removed essentially without harming the ceramic surface and which has been applied over the ceramic surface containing the patterned mechanical interlocks.

The closest prior art of record to O'Donnell et al. (U.S. Pat. 6,620,520) does not suggest Applicant's claimed subject matter and the exterior surface layer in O'Donnell is not suggested to be sacrificial and function for protection. O'Donnell further does not suggest the exterior surface layer deposited over the mechanical interlocks which are undercut.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1753

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney G. McDonald
Primary Examiner
Art Unit 1753

RM
January 13, 2005